

NOISE IMPACT ANALYSIS

**Cingular Wireless
Site Number: SS-628-01
Site Name: Jamacha Hillside Water Tank
12887 Weighorst Way
El Cajon, California 92019**

**County of San Diego Major Use Permit
ZAP Number: P06-038**

Prepared For

**PlanCom Inc.
Attention: Karen Adler
302 State Place
Escondido, California 92029
Phone 760-715-8703
Fax 760-295-9487**

Applicant

**Cingular Wireless
6925 Lusk Boulevard
San Diego, California 92121
Phone 858-453-6130**

Property Owner

**Otay Water District
Attention: Mike Felly
2554 Sweetwater Springs Boulevard
El Cajon, California 91978
Phone 619-670-2274**

Prepared By

**EILAR ASSOCIATES
Acoustical & Environmental Consulting
539 Encinitas Boulevard, Suite 206
Encinitas, California 92024
www.eilarassociates.com
Phone 760-753-1865
Fax 760-753-2597**

Job # A60820N1

October 11, 2006

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1.0 EXECUTIVE SUMMARY

The proposed Cingular wireless telecommunications facility project, known as Jamacha Hillside Water Tank, consists of the construction of an unmanned telecommunications facility consisting of a 11-foot high by 12-foot wide by 24-foot long CMU block equipment shelter which will house equipment cabinets for wireless telecommunications. Also planned are eight panel antennas which will be mounted on a proposed 50-foot high monobroadleaf, four panel antennas which will be mounted on a proposed 60-foot high monobroadleaf, a CMU block wall, two HVAC units, and new electric and telco runs to the area of the equipment shelter. The project site is located at 12887 Weighorst Way in El Cajon, County of San Diego, California.

The purpose of this report is to assess noise impacts from on-site noise sources, and to determine if mitigation is necessary and feasible to reduce project related property line noise impacts to below 45 dBA, in compliance with the County of San Diego most restrictive nighttime property line noise limit.

Based on the project information available, calculations show that without mitigation, the unmanned operation of this facility will be in compliance with the County of San Diego nighttime property line noise limits.

Calculations show that the HVAC equipment noise impacts from the proposed Cingular facility will be as high as 44.2 dBA L_{EQ} at the eastern property line, at the worst-case location.

The worst-case combined property line noise impacts due to the existing and proposed equipment at this project site will be as high as 44.9 dBA L_{EQ} at the eastern property line, at the worst-case location and will not exceed the County of San Diego nighttime property line noise limits.

2.0 INTRODUCTION

This acoustical analysis report is submitted to satisfy the County of San Diego requirement for a major use permit. Its purpose is to assess noise impacts from on-site project related noise sources, and to determine if mitigation is necessary and feasible to reduce property line noise impacts to below 45 dBA, in compliance with the County of San Diego nighttime property line noise limit.

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting, abbreviated "dBA," to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol " L_{EQ} " unless a different time period is specified, " L_{EQ} " is implied to mean a period of one hour. Some of the data may also be presented as octave-band-filtered and/or A-octave-band-filtered data, which are a series of sound spectra centered about each stated frequency, with half of the bandwidth above and half of the bandwidth below each stated frequency. This data is typically used for machinery noise analysis and barrier-effectiveness calculations.

The Community Noise Equivalent Level (CNEL) is a 24-hour average, where sound levels during evening hours of 7 p.m. to 10 p.m. have an added 5 dB weighting, and sound levels during nighttime hours of 10 p.m. to 7 a.m. have an added 10 dB weighting. This is similar to the Day-Night Sound Level (L_{DN}), which is a 24-hour average with 10 dB added weighting on the same nighttime hours but no added weighting on the evening hours. Sound levels expressed in CNEL are always based on A-weighted decibels. These data unit metrics are used to express noise levels for both measurement and

municipal noise ordinances and regulations, for land use guidelines, and enforcement of noise ordinances. Further explanation can be provided upon request.

Noise emission data is often supplied per the industry standard format of Sound Power, which is the total acoustic power radiated from a given sound source as related to a reference power level. Sound Power differs from Sound Pressure, which is the fluctuations in air pressure caused by the presence of sound waves, and is generally the format that describes noise levels as heard by the receiver.

Sound Pressure is the actual noise experienced by a human or registered by a sound level instrument. When Sound Pressure is used to describe a noise source it must specify the distance from the noise source to provide complete information. Sound Power is a specialized analytical method to provide information without the distance requirement, but it may be used to calculate the sound pressure at any desired distance.

2.1 Project Location

The subject property is located at 12887 Weighorst Way in El Cajon, County of San Diego, California. The Assessor's Parcel Number (APN) is 502-240-09-00. The overall property is rectangular in shape with an overall site area of approximately 2 acres. The land use designation for the subject parcel is S-90 for special purpose use. Planned neighboring land uses in the project vicinity are residential to the north and park areas to the south, east and west.

The site is at the top of a steep mountain peak west of Jamacha Road. From the site there is a clear view of the surrounding area in all directions. A large section of the subject parcel is currently occupied by a water tank facility operated by the Otay Water District. There are currently two existing wireless facilities on the site that are unrelated to the Cingular project. One of these facilities is operated by Sprint PCS, the other by T-Mobile. There are also two other wireless facilities planned, one by Nextel, and another by Cricket.

With the exception of the existing water tank facility, the communications facilities, and an access road, the subject property is essentially undeveloped land.

The proposed lease area site is in the central vicinity of the subject property and is approximately 400 square feet in area.

For a graphic representation of the site, please refer to the Thomas Guide Map, Assessor's Parcel Map, Satellite Aerial Photograph, Topographic Map, and Land Use Map provided as Figures 1 through 5, respectively.

2.2 Project Description

The proposed project consists of the construction of an unmanned telecommunications facility consisting of an 11-foot high by 12-foot wide by 24-foot long CMU block equipment shelter which will house equipment cabinets for wireless telecommunications. Also planned are eight panel antennas which will be mounted on a proposed 50-foot high monobroadleaf, four panel antennas which will be mounted on a proposed 60-foot high monobroadleaf, a CMU block wall, two HVAC units, and new electric and telco runs to the area of the equipment shelter.

For additional project details, please refer to the project plans provided in Appendix A.

2.3 Applicable Noise Standards

The noise regulations applicable to this project are contained within the San Diego County Code, Section 8.32.040, entitled Sound Level Limits. Based on these noise regulations, and the County of San Diego scoping letter, dated August 10, 2006, the following property line noise limits apply for this project: 50 dBA from 7 a.m. to 10 p.m. and 45 dBA from 10 p.m. to 7 a.m. Planning for this project will be based on the more restrictive nighttime limit of 45 dBA.

Please refer to copies of the pertinent related sections from the County of San Diego scoping letter which is provided as Appendix B and pertinent sections of the San Diego County Code provided as Appendix C.

3.0 ENVIRONMENTAL SETTING

3.1 Existing Noise Environment

3.1.1 Existing Noise Sources

The existing noise environment is primarily a result of distant traffic noise and the existing wireless facilities.

Existing Sprint Facility

One of the existing wireless equipment facilities, operated by Sprint PCS, consists of one type of significant noise source, which is a Modcell unit/power supply combination (or similar) un-enclosed equipment cabinet set. One of these cabinet sets is used for this Sprint PCS facility.

Manufacturer's noise emission data for a Modcell unit/power supply cabinet combination were unavailable. To determine the expected equipment exterior noise levels for this analysis, it was necessary to measure the noise level of a single operational unit. A noise level measurement of a single existing equipment cabinet set was made at an operational Sprint PCS wireless installation at 1275 Quail Gardens Drive, Encinitas, California, at 9:30 a.m. on January 21, 2005. The measured noise level was 68.9 dBA L_{EQ} at 3 feet.

The octave-band noise data for the equipment cabinet noise measurement used in the new Cingular planning analysis is provided in Table 1.

Table 1. Measured Noise Level of a Single Operational Sprint Modcell Cabinet Set									
Octave Band Center Frequency (Hz)	63	125	250	500	1K	2K	4K	8K	L_{EQ}
Noise Level at 3 feet (dB)	68.9	67.0	71.3	68.6	61.8	56.7	48.8	44.5	68.9 dBA

Existing T-Mobile Facility

A second existing wireless equipment facility, operated by T-Mobile, consists of one type of significant noise source, which are Ericsson RBS 2106 un-enclosed equipment cabinets. Three of these cabinets are installed at this facility.

Manufacturer's noise emission data for an Ericsson RBS 2106 cabinet were unavailable. To determine the expected equipment exterior noise levels for this analysis, it was necessary to measure the noise level of a single operational unit. A noise level measurement of a single existing Cingular RBS 2106 equipment cabinet was made at an operational Cingular installation at 2190 Carmel Valley Road in Del Mar (City of San Diego), at 3:00 p.m. on April 8, 2004. The measured noise level was 53.0 dBA L_{EQ} at 5 feet. The octave-band noise data for the RBS 2106 equipment cabinet noise measurement used in the new Cingular planning analysis is provided in Table 2.

Table 2. Measured Noise Level of a Single Operational Ericsson RBS 2106 Cabinet									
Octave Band Center Frequency (Hz)	63	125	250	500	1K	2K	4K	8K	L_{EQ}
Noise Level at 5 feet (dB)	64.4	61.2	55.3	47.0	45.9	42.2	44.0	34.6	53.0 dBA

3.1.2 Ambient Noise Monitoring

An on-site inspection was conducted at 8:00 a.m. on Wednesday, September 7, 2006. The weather conditions were as follows: winds from the south of 3-5 mph, low humidity, and temperatures in the low-60's. A 5-minute ambient noise measurement of 51.2 dBA L_{EQ} was taken at a location within the proposed lease area. The microphone position was approximately five feet above the existing grade.

3.2 Future Noise Environment

The future noise environment in the vicinity of the project site will be primarily a result of the same noise sources, as well as the proposed Cingular, Nextel, and Cricket wireless facilities.

3.2.1 Project Related Noise Sources

Proposed Cingular Facility

The proposed Cingular wireless equipment facility consists of one type of significant noise source, which are exterior-mounted air conditioning units.

This project proposes the use of two Marvair ComPac II HVAC units. While two HVAC units are planned to be installed on the exterior of the equipment shelter, only one is expected to be operational at a time, never running simultaneously. The proposed Cingular facility is planned to be operational 24 hours a day, 7 days a week.

To determine the expected equipment exterior noise levels for this analysis, it was necessary to measure the noise level of a single operational unit. The manufacturer's data show the noise emission level for this unit as 73 dBA at 5 feet. A noise level measurement of a single existing Marvair ComPac II HVAC unit was made at an operational Verizon installation at Casa de las Campanas, 18655 West Bernardo Drive, in the City of San Diego, California, at 7:30 a.m. on November 24, 2003. The measured noise level was 74.9 dBA L_{EQ} at 5 feet. The measurement may have a small traffic noise contribution, as it is slightly higher than the manufacturer's data; therefore, the measured noise level will be used for worst-case analysis and noise planning purposes. The octave-band noise data for the HVAC unit noise measurement used in the new Cingular planning analysis is provided in Table 3.

Table 3. Measured Noise Level of a Single Operational Marvair ComPac II HVAC Unit									
Octave Band Center Frequency (Hz)	63	125	250	500	1K	2K	4K	8K	L_{EQ}
Noise Level at 5 feet (dB)	79.9	77.5	75.5	70.5	70.6	66.8	59.6	55.2	74.9 dBA

The Cingular wireless facility also incorporates fully enclosed equipment cabinets housed within a pre-fabricated shelter. Noise impacts from these equipment cabinets are not considered significant, and therefore are not included in the noise impact analysis.

Proposed Nextel Facility

A Nextel wireless equipment facility is also proposed for the subject property. It consists of a prefabricated equipment shelter which will house equipment cabinets for wireless telecommunications equipment. The Nextel facility will also make use of two Marvair ComPac II HVAC units. While two HVAC units are typically installed on the exterior of an equipment shelter, only one is expected to be operational at a time, never running simultaneously. The proposed Nextel facility is planned to be operational 24 hours a day, 7 days a week.

Proposed Cricket Facility

An additional wireless equipment facility is proposed for the subject property by Cricket Communications and is unrelated to the proposed Cingular project. Details of the proposed Cricket wireless equipment facility were unavailable for review by Eilar Associates. However, the typical configuration for most Cricket wireless facilities consists of two types of significant noise sources, which are two Nortel CMO equipment cabinets and a single PPC cabinet.

To determine the expected equipment exterior noise levels for this analysis, it was necessary to measure the noise level of a single operational unit of both types.

A noise level measurement of a single existing Nortel CMO equipment cabinet was made at an operational Cricket installation at 5358 West Spruce Avenue in Fresno, California at 11:00 a.m. on Wednesday, December 21, 2005. The site is identified by Cricket as FAT 030. The measured noise level was 61.4 dBA L_{EQ} at 5 feet. The octave-band noise data for the Nortel CMO equipment cabinet noise measurement used in the new Cingular planning analysis is provided in Table 4.

Table 4. Measured Noise Level of a Single Operational Nortel CMO Equipment Cabinet									
Octave Band Center Frequency (Hz)	63	125	250	500	1K	2K	4K	8K	L _{EQ}
Noise Level at 5 feet (dB)	61.3	54.2	55.0	59.1	56.8	54.6	48.5	38.2	61.4 dBA

A noise level measurement of a single PPC cabinet was made at the Cricket warehouse located at 7010 Carroll Road in San Diego, California at 9:00 a.m. on Tuesday, May 30, 2006. The measured noise level was 61.7 dBA L_{EQ} at 3 feet. The octave-band noise data for the PPC cabinet noise measurement used in the new Cingular planning analysis is provided in Table 5.

Table 5. Measured Noise Level of a Single Operational PPC Cabinet									
Octave Band Center Frequency (Hz)	63	125	250	500	1K	2K	4K	8K	L _{EQ}
Noise Level at 3 feet (dB)	62.7	60.3	62.5	62.8	53.4	47.6	40.6	33.2	61.7 dBA

4.0 METHODOLOGY AND EQUIPMENT

4.1 Methodology

4.1.1 Cadna Noise Modeling Software

Modeling of the outdoor noise environment is accomplished using Cadna Ver. 3.5, which is a model-based computer program developed by DataKustik for predicting noise impacts in a wide variety of conditions. Cadna (Computer Aided Noise Abatement) assists in the calculation, presentation, assessment, and mitigation of noise exposure. It allows for the input of project information such as noise source data, barriers, structures, and topography to create a detailed CAD model and uses the most up-to-date calculation standards to predict outdoor noise impacts.

4.1.2 Summary of Site Specific Features Included in Cadna Model

Features at the project site that were included in the Cadna noise prediction model are listed in Table 6. These are considered to be the only on-site permanent features that will contribute to the noise environment or affect the noise propagation of the existing and proposed noise sources to the adjacent property lines.

Table 6. Summary of Site Features Included in Cadna Model	
Description	Height
Topographic Contours	750 to 795 feet in elevation (AMSL)
Existing Water Tank	56 feet above grade
Existing Sprint Equipment Cabinets	4 feet above grade
Existing CMU Wall at Sprint Facility	8 feet above grade
Existing T-Mobile Equipment Cabinets	4 feet above grade
Proposed Cingular Equipment Shelter	11.2 feet above grade
Proposed Cingular (Marvair) HVAC Units	4 feet above grade
Proposed Nextel Equipment Shelter	11 feet above grade
Proposed Nextel (Marvair) HVAC Units	4 feet above grade
Proposed CMU Wall at Cingular and Nextel Facilities	11.3 feet above grade
Proposed Cricket Equipment Cabinets	4.5 feet above grade

4.1.3 Calculated Noise Levels for Model Comparison

In order to validate the results of the Cadna noise prediction model, the noise impacts from the proposed HVAC units were manually calculated as simple attenuation by distance. This was done for each of the receiver locations. These values were compared to those predicted by Cadna. The Cadna model includes additional attenuation due to intervening structures and ground absorption, which the differences in modeled and calculated noise levels are attributed to. This data is summarized in Table 7.

Table 7. Calculated Noise Levels for Model Comparison						
Noise Source	Receiver	Location	Distance from Source (ft.)	Calculated Noise Level ¹ (dBA)	Cadna Model Noise Level ² (dBA)	Difference (dB)
Marvair ComPac II 74.9 dBA Measured @ 5 ft.	R1	Northern Property Line	114	47.8	32.8	15.0
	R2	Southern Property Line	212	42.4	40.3	2.1
	R3	Eastern Property Line	90	49.8	44.2	5.6
	R4	Western Property Line	227	41.7	21.1	20.6

¹ Calculated as attenuation by distance only, $L_2 = L_1 - 20 \log \left(\frac{d_2}{d_1} \right)$
² As predicted by Cadna model

The attenuation differences between the manually calculated and Cadna model values are primarily due to barrier effect of the proposed equipment shelters, the CMU wall, and the existing water tank.

4.2 Measurement Equipment

Some or all of the following equipment was used at the site to measure existing noise levels:

- Larson Davis Model 824, Type 1 Sound Level Meter, Serial #824A0344
- Larson Davis Model CA250, Type 1 Calibrator, Serial #2520

The sound level meter was field-calibrated immediately prior to the noise measurement and checked afterwards, to ensure accuracy. All sound level measurements conducted and presented in this report, in accordance with the regulations, were made with sound level meters that conform to the American National Standards Institute specifications for sound level meters (ANSI S1.4-1983, R2001). All instruments are maintained with National Bureau of Standards traceable calibration, per the manufacturers' standards.

5.0 IMPACTS

Based on the project information available, calculations show that without mitigation, the unmanned operation of this facility will be in compliance with the County of San Diego nighttime property line noise limits. Calculations show that the HVAC equipment noise impacts from the proposed Cingular facility will be as high as 44.2 dBA L_{EQ} at the eastern property line, at the worst-case location.

The worst-case combined property line noise impacts due to the existing and proposed equipment at this project site will be as high as 44.9 dBA L_{EQ} at the eastern property line, at the worst-case location and will not exceed the County of San Diego nighttime property line noise limits.

The calculated combined noise levels at each property line at the worst-case locations are summarized in Table 8. For details of the acoustical calculations, please refer to Appendix D: Cadna Analysis Data and Results. Please also refer to Figure 6: Site Plan Showing Noise Impacts to Project Vicinity and Property Line Receiver Locations.

Table 8. Calculated Combined Wireless Facility Noise Impact Levels								
Receiver Location	Sprint (dBA L _{EQ})	T-Mobile (dBA L _{EQ})	Nextel (dBA L _{EQ})	Cricket (dBA L _{EQ})	Sum ¹ (dBA L _{EQ})	Cingular (dBA L _{EQ})	All ² (dBA L _{EQ})	Increase due to Cingular (dB)
R1, Northern Property Line	26.0	23.6	41.1	32.1	41.8	32.8	42.3	0.5
R2, Southern Property Line	13.8	10.3	27.4	30.8	32.5	40.3	40.9	8.4
R3, Eastern Property Line	6.0	4.6	34.3	32.3	36.4	44.2	44.9	8.5
R4, Western Property Line	36.3	30.7	21.2	11.4	37.5	21.1	37.6	0.1

¹ Sprint, T-Mobile, Nextel, and Cricket equipment combined noise level

² All equipment combined noise level

6.0 MITIGATION

Mitigation is not required for the Cingular wireless telecommunications facility for compliance with the County of San Diego property line noise limits. There are no “noise control elements” for the proposed Cingular equipment that ensure compliance with the County of San Diego nighttime property line noise limits.

7.0 CONCLUSION

The proposed Cingular wireless telecommunications facility will be in compliance with all applicable County of San Diego property line noise limits.

This analysis is based upon a current worst case scenario of anticipated, typical equipment for this type of wireless facility. Substitution of equipment with higher noise emission levels may invalidate the recommendations of this study.

These conclusions and recommendations are based on the most up-to-date, project-related information available. However, noise characteristics of mechanical equipment may vary for specific installations. Verification of compliance with County of San Diego noise regulations can be provided, if desired, by conducting a noise survey consisting of sound level measurements at or close to the nearest impacted locations in each direction, after the project is built and in operation.

This is best accomplished in the late night or very early morning hours while the equipment is in full operation and other ambient noise sources are minimized. If any sound attenuation is found to be necessary, it can be specified at that time. We do not expect that any additional sound attenuation will be necessary within the scope of this project, specifically for the proposed Cingular wireless facility.

8.0 CERTIFICATION

This report is based on the related project information received and measured noise levels, and represents a true and factual analysis of the acoustical impact issues associated with the proposed Cingular wireless telecommunications facility, located at 12887 Weighorst Way in El Cajon, County of San Diego, California. This report was prepared by Justin Smith, Michael Burrill, Charles Terry, and Douglas Eilar.

EILAR ASSOCIATES

Justin D. Smith, Senior Acoustical Consultant

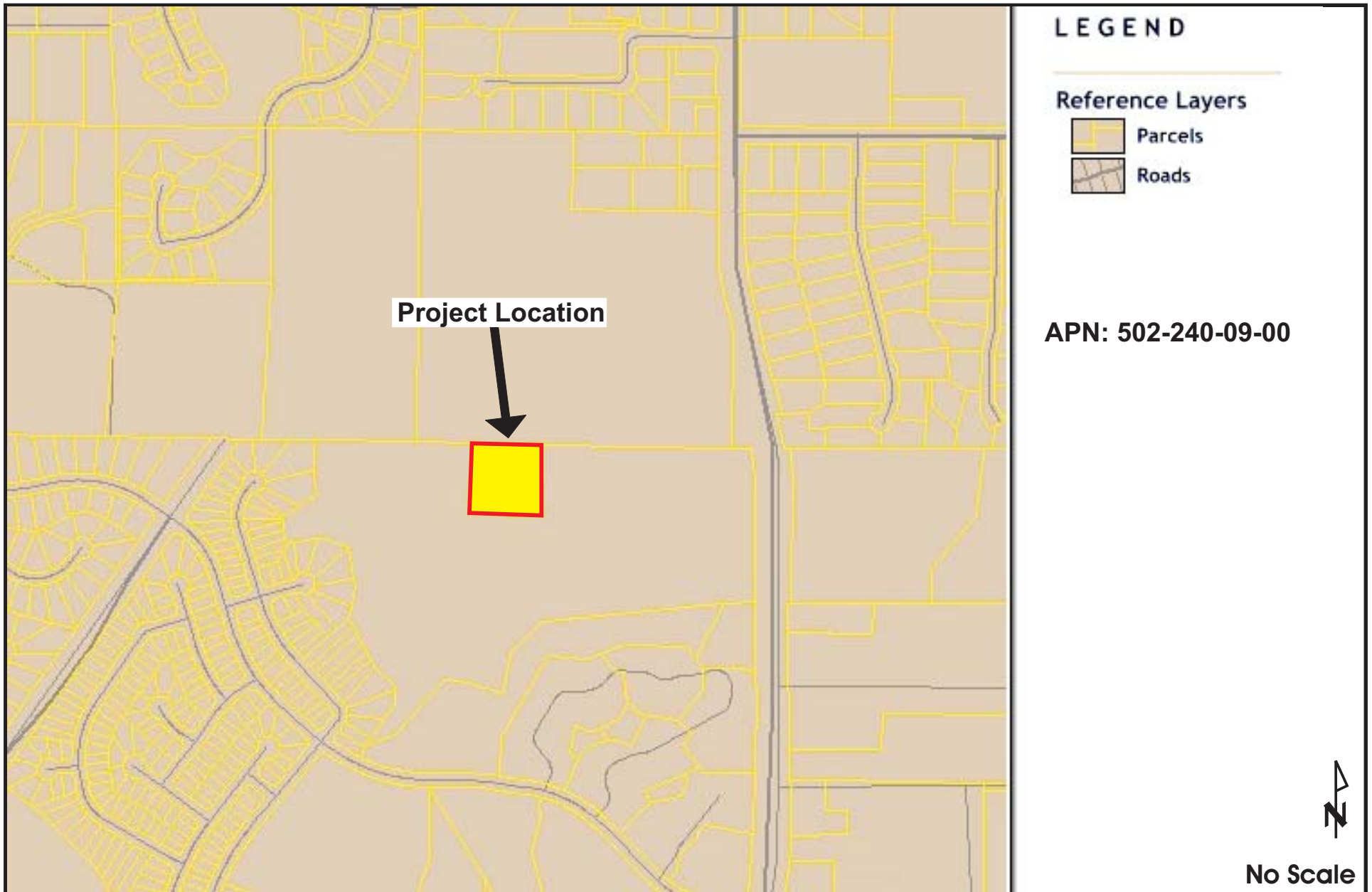


Douglas K. Eilar, Principal

9.0 REFERENCES

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2. San Diego County Code
3. Harris, Cyril M., *Handbook of Acoustical Measurements and Noise Control*, Acoustical Society of America, 3rd Edition, 1998.
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7. Knudsen, Vern O. and Harris, Cyril M., *Acoustical Designing In Architecture*, American Institute of Physics for the Acoustical Society of America, 2nd Edition, 1978.
8. Raichel, Daniel R., *The Science and Applications of Acoustics*, American Institute of Physics Press for the Acoustical Society of America, 1st Edition, 2000.

FIGURES



Eilar Associates
539 Encinitas Boulevard, Suite 206
Encinitas, California 92024
760-753-1865

Assessor's Parcel Map
Job # A60820N1

Figure 2



LEGEND

Reference Layers



Roads

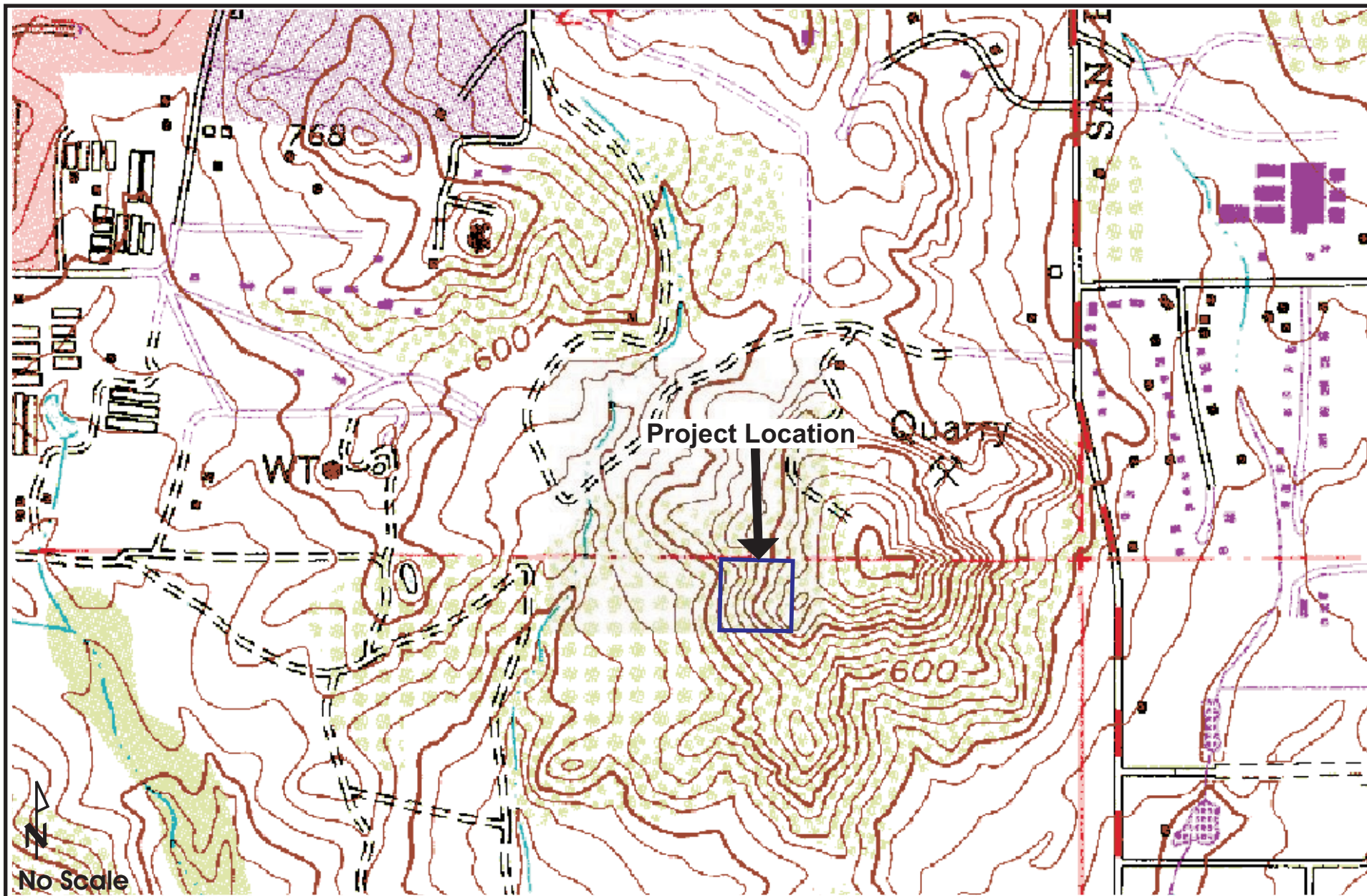


No Scale

Eilar Associates
539 Encinitas Boulevard, Suite 206
Encinitas, California 92024
760-753-1865

Satellite Aerial Photograph
Job # A60820N1

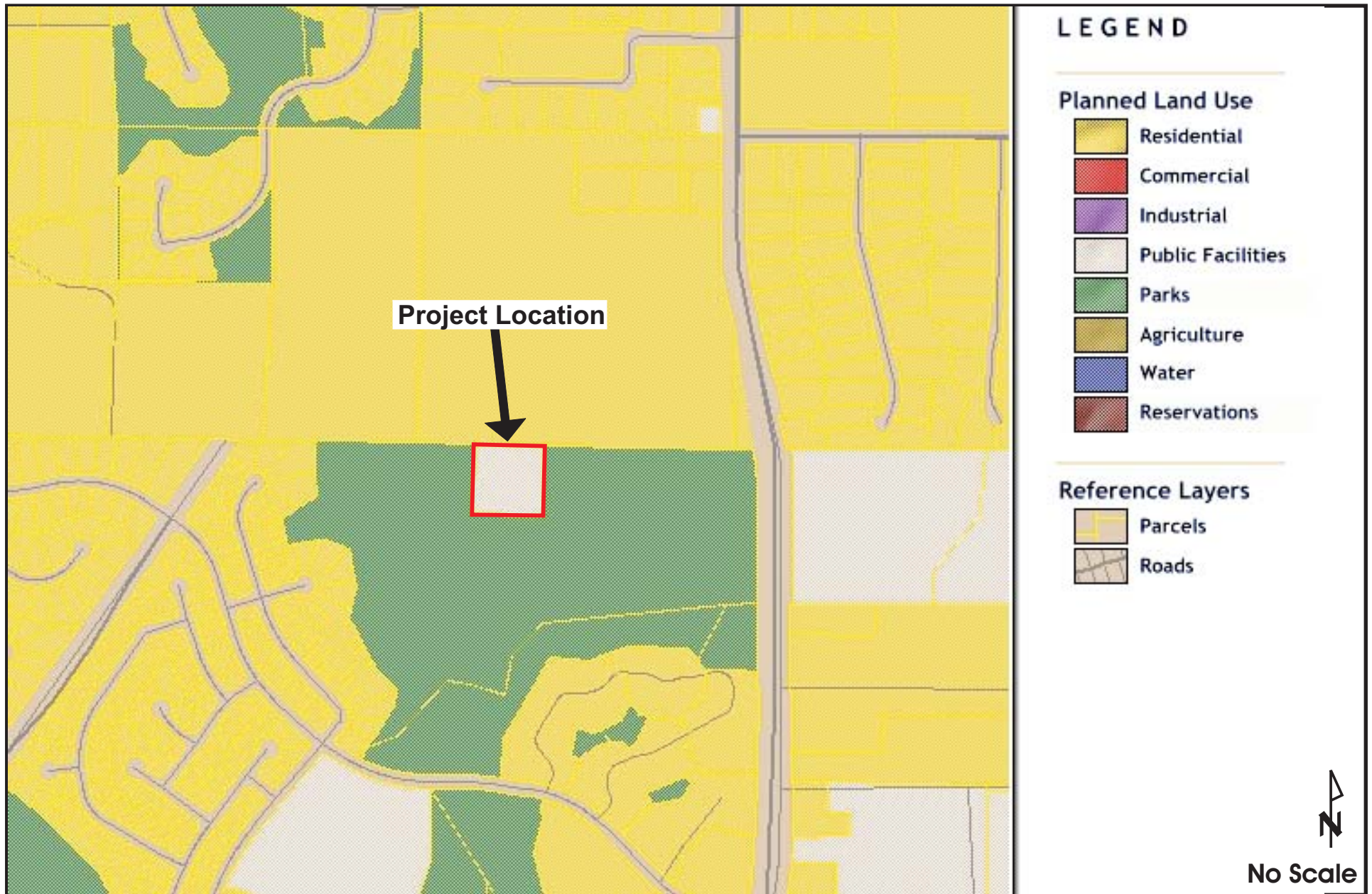
Figure 3



Eilar Associates
539 Encinitas Boulevard, Suite 206
Encinitas, California 92024
760-753-1865

Topographic Map
Job # A60820N1

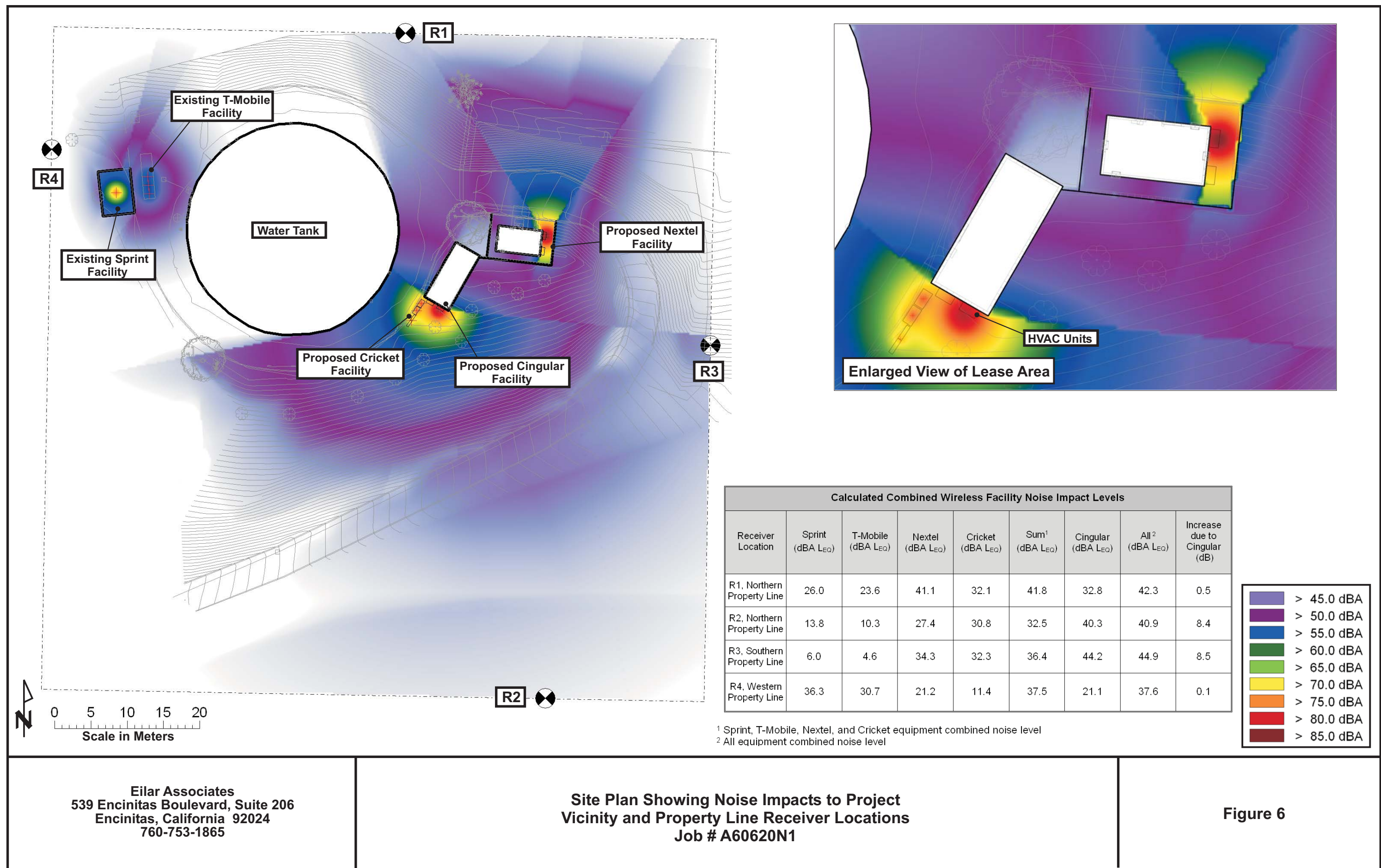
Figure 4



Eilar Associates
539 Encinitas Boulevard, Suite 206
Encinitas, California 92024
760-753-1865

Planned Land Use Map
Job # A60820N1

Figure 5



APPENDIX A

Site Plans for Cingular Wireless Telecommunications Facility



NOT FOR USE OR DISCLOSURE OUTSIDE CINGULAR WIRELESS EXCEPT UNDER WRITTEN AGREEMENT

DRIVING DIRECTIONS FROM CINGULAR WIRELESS OFFICE:

- TAKE 805 SOUTH TO 94 EAST
- TAKE 94 EAST TO FURY LANE
- TURN LEFT ON FURY
- TURN RIGHT ON WIEGHORST
- AT THE END OF WIEGHORST IS A GATE ON THE RIGHT-HAND SIDE

PROJECT APPLICANT:
CINGULAR WIRELESS
6925 LUSK BLVD
SAN DIEGO, CA 92121

CONSTRUCTION MANAGER:
PLANCON INC.
302 STATE PLACE
ESCONDIDO, CA 92029

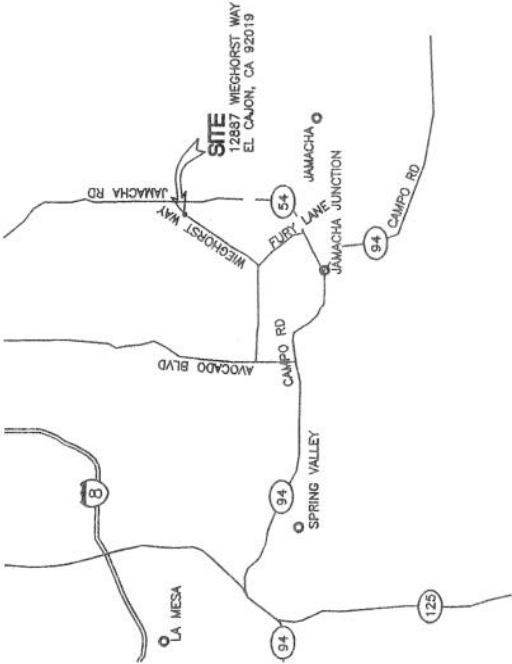
PLANNING REPRESENTATIVE:
DARRELL DAUGHERTY
PLANCON INC.
302 STATE PLACE
ESCONDIDO, CA 92029
819.817.8701 PHONE

SITE ACQUISITION:
JODY BITTERLIN
PLANCON INC.
302 STATE PLACE
ESCONDIDO, CA 92029
858.349.8055 PHONE

R.E. ENGINEERING REPRESENTATIVE:
DOUG STEPHENS
CINGULAR WIRELESS
6625 LUSK BLVD.
SAN DIEGO, CA 92121
619.698.9301 PHONE

PROPERTY OWNER:
OTAY WATER DISTRICT
2554 SWEETWATER SPRINGS BOULEVARD
SPRING VALLEY, CA 91977
SITE CONTACT: DAN MCNEGGARD
619.670.2289 PHONE

ARCHITECT:
DI DONATO ASSOCIATES
3939 FIRST AVE. SUITE 100
SAN DIEGO, CA 92103
619.299.4210 PHONE
619.299.4250 FAX
ddonato@diacol.com



THOMAS BROTHER'S MAP #1271-J4

VICINITY MAP

A PORTION OF THE NORTH HALF, OF THE NORTH HALF, OF THE NORTHEAST QUARTER OF SECTION 11, TOWNSHIP 16 SOUTH, RANGE 10 EAST, SAN DIEGO COUNTY, CALIFORNIA, AS SHOWN ON A RECORD OF SURVEY NUMBER 11714, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

CONTACTS

#	TYPE OF INSPECTION	DESIGN STRENGTH

SPECIAL INSPECTIONS

6

PROJECT INFORMATION

FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. WIRELESS TELECOMMUNICATIONS MECHANICAL EQUIPMENT ROOMS ARE EXEMPT FROM REQUIREMENTS TO PROVIDE BUILDING UPDATES FOR DISABLED ACCESS PER THE FOLLOWING:
CSC SECTION 105B—BUILDING ACCESSIBILITY
CAL ACS ACCESSIBILITY STANDARDS INTERPRETIVE MANUAL

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.

ADA COMPLIANCE

7

SHEET INDEX

CONSTRUCTION REPRESENTATIVE	
SITE ACQUISITION	
R.E. ENGINEERING REPRESENTATIVE	
PLANNING REPRESENTATIVE	
CINGULAR REPRESENTATIVE	
LANDLORD	
DN-ES11	

APPROVALS

8

SS-628-01

JAMACHA-HILLSIDE WATER TANK

12887 WIEGHORST WAY
EL CAJON, CA 92019

- T01 TITLE SHEET
- Z01 SITE PLAN
- Z02 AREA PLAN
- Z03 ELEVATIONS
- Z04 ELEVATIONS
- Z05 DETAILS

PROJECT DESCRIPTION:
THE PROJECT CONSISTS OF THE INSTALLATION AND OPERATION OF (12) TWELVE ANTENNAS AND ASSOCIATED EQUIPMENT CABINETS FOR CINGULAR WIRELESS TELECOMMUNICATIONS NETWORK.
A TOTAL OF (8) EIGHT ANTENNAS ARE TO BE MOUNTED ON A PROPOSED 50' HIGH MONOROADLEAF AND A TOTAL OF (4) FOUR ANTENNAS ARE TO BE MOUNTED ON A PROPOSED 60' HIGH MONOROADLEAF. THE EQUIPMENT CABINETS, AT GROUND LEVEL, ARE TO BE LOCATED INSIDE A PROPOSED 1,2328' SITE-BUILT EQUIPMENT SHELTER.
THE FACILITY WILL ENHANCE THE GENERAL HEALTH, SAFETY, AND WELFARE OF THE COUNTY AND SURROUNDING CITIES BY PROVIDING MORE RELIABLE CELLULAR COMMUNICATION AT THIS LOCATION.

NOTE: EXISTING CARRIERS: T-MOBILE & SPRINT

NOTE: FUTURE NEXTEL AND CRICKET EQUIPMENT SHOWN IS FOR REFERENCE ONLY, AND WILL BE PROCESSED UNDER SEPARATE PERMITS.

SITE ADDRESS:
12887 WIEGHORST WAY
EL CAJON, CA 92019

JURISDICTION:
COUNTY OF SAN DIEGO

CURRENT USE:
WATER TANK

ASSESSOR'S PARCEL NUMBER:
502-240-09

EXISTING OCCUPANCY:
N/A

PROPOSED OCCUPANCY:
S-2 AT EQUIPMENT SHELTER

WATER/SEWAGE:
N/A

UTILITIES:
ELECTRICAL: SDGE

TELEPHONE: SBC

FIRE DEPT.: COUNTY OF SAN DIEGO

EXISTING TYPE OF CONSTRUCTION:
N/A

EXISTING ZONING:
S90, HOLDING AREA USE REGULATIONS

ALL WORK SHALL COMPLY WITH THE FOLLOW APPLICABLE CODES:

CALIFORNIA BUILDING CODE, 2001 EDITION

CALIFORNIA PLUMBING CODE, 2001 EDITION

CALIFORNIA MECHANICAL CODE, 2001 EDITION

CALIFORNIA ELECTRICAL CODE, 2001 EDITION

CALIFORNIA FIRE CODE, 2001 EDITION

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.

PROJECT NAME

SS-628-01
JAMACHA-HILLSIDE WATER TANK



12887 WIEGHORST WAY, EL CAJON, CA 92019

ISSUES REVISIONS

DATE	BY	ISSUE DESCRIPTION
08/01/05	TW	FINALS FOR SUBMITTAL
08/21/05	JRL	REVISED TO INCLUDE CRICKET
1/16/06	MLB	ISSUE FOR REVIEW
1/24/06	MLB	ISSUE FOR REVIEW
3/4/06	MLB	ISSUE FOR REVIEW
3/16/06	MLB	ISSUE FOR SUBMITTAL
4/24/06	MLB	REVISED PER PLANNING COMMENTS
5/1/06	MLB	ISSUE FOR FINAL
8/16/06	MLB	REVISED PER PLANNING COMMENTS
10/5/06	MLB	REVISED MECHANICAL LOCATION

SHEET INFORMATION

DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS

T01
TITLE PAGE

LEGAL DESCRIPTION

5

ARCHITECT



DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS
619.299.4210 : 619.299.4250 FAX : DDAMAIL@AOL.COM

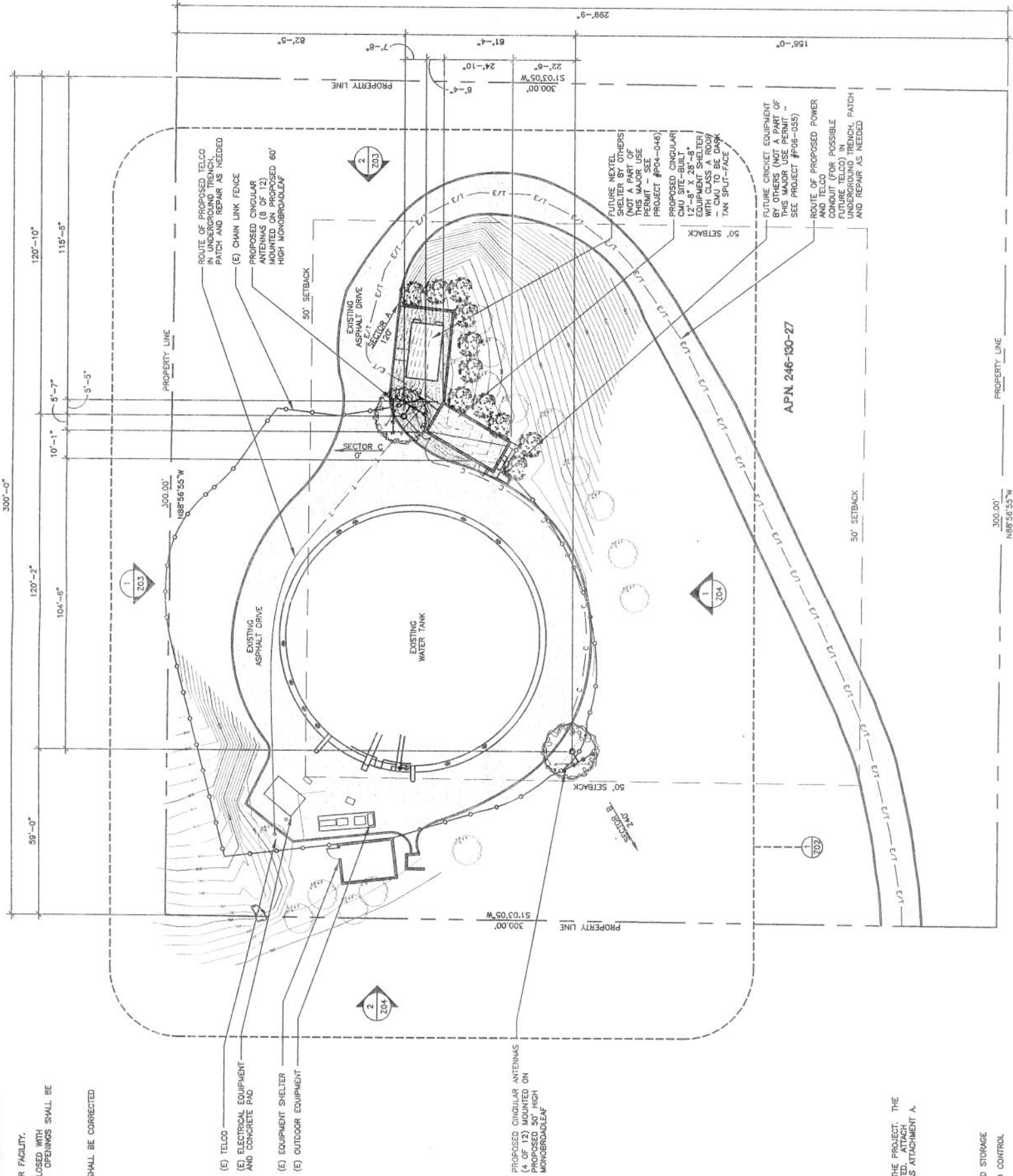
FIRE DEPARTMENT NOTES:

1. EMERGENCY POWER SUPPLY SHALL BE IN ACCORDANCE WITH ARTICLE 64, STATIONARY LEAD-ACID BATTERY SYSTEMS OF THE CALIFORNIA FIRE CODE. SIGNS SHALL BE POSTED AS REQUIRED IN CALIFORNIA FIRE CODE SECTION 64-4.7.
2. MAINTAIN A MINIMUM 30 FOOT OF NON-COMBUSTIBLE ON ALL SIDES OF THE CELLULAR FACILITY.
3. EXTERIOR SHELTER WALLS TO BE NON-COMBUSTIBLE. EAVES, IF ANY, SHALL BE ENCLOSED WITH FIRE-RESISTIVE MATERIAL. ROOF SHALL BE CLASS A ASSEMBLY WITH EDGE PROTECTION. OPENINGS SHALL BE PROTECTED WITH FIRE-RATED ASSEMBLIES.
4. A KNOX BOX SHALL BE INSTALLED FOR ENTRANCE TO STRUCTURE.
5. INTERFERENCE WITH FIRE DEPARTMENT RADIO COMMUNICATION FROM CELLULAR SITES SHALL BE CORRECTED IMMEDIATELY BY CINGULAR WIRELESS.

BMP NOTES:

THE BMPs SELECTED ARE THOSE THAT WILL BE IMPLEMENTED DURING CONSTRUCTION OF THE PROJECT. THE FOLLOWING IS A LIST OF AVAILABLE BMPs, THEIR PURPOSES, PLANNED MAINTENANCE OF THE BMPs, SELECTED DESCRIPTIONS OF THE BMPs, AND THEIR APPLICATION (AVAILABLE AT THE DPW COUNTER) AS ATTACHMENT A.

<input checked="" type="checkbox"/> SILT FENCE	<input type="checkbox"/> DESILTING BASIN
<input type="checkbox"/> FIBER ROLLS	<input type="checkbox"/> GROWEL BAG BERM
<input type="checkbox"/> STREET SWEEPING AND VACUUMING	<input checked="" type="checkbox"/> SANDBAG BARRIER
<input type="checkbox"/> STORM DRAIN INLET PROTECTION	<input type="checkbox"/> MATERIAL DELIVERY AND STORAGE
<input type="checkbox"/> STOCKPILE MANAGEMENT	<input type="checkbox"/> SPILL PREVENTION AND CONTROL
<input type="checkbox"/> SOILD WASTE MANAGEMENT	<input checked="" type="checkbox"/> CONCRETE WASTE MANAGEMENT
<input checked="" type="checkbox"/> STABILIZED CONSTRUCTION ENTRANCE/EXIT	<input type="checkbox"/> WATER CONSERVATION PRACTICES
<input type="checkbox"/> DEWATERING OPTIONS	<input type="checkbox"/> PAVING AND GRINDING OPERATIONS
<input type="checkbox"/> VEHICLE AND EQUIPMENT MAINTENANCE	
<input type="checkbox"/> ANY MINOR SLOPES CREATED INCIDENTAL TO CONSTRUCTION AND NOT SUBJECT TO A MAJOR OR MINOR GRAD	
<input type="checkbox"/> PERMIT SHALL BE PROTECTED BY COVERING WITH PLASTIC OR TARP PRIOR TO A RAIN EVENT, AND SHALL HAVE VEGETATIVE COVER REESTABLISHED WITHIN 180 DAYS OF COMPLETION OF THE SLOPE AND PRIOR TO FINAL BUILDING APPROVAL.	
NO BMPs NEEDED. ACTIVITIES ARE NOT CONSIDERED TO GENERATE POLLUTANTS.	



ARCHITECT

DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS
9939 FIRST AVENUE, SUITE 100, SAN DIEGO, CA 92131
619.299.4210 • 619.299.4250 FAX • DDAA@AOL.COM

PROJECT NAME

x.cingular
WINNERS

08U66 REVISIONS

09/01/05	THW	FINALS FOR SUBMITAL
09/21/05	JAL	REVISED FINALS
1/18/05	MLB	REVISED TO INCLUDE CRICKET
1/24/05	MLB	ISSUE FOR REVIEW
1/26/05	MLB	ISSUE FOR REVIEW
2/6/05	MLB	ISSUE FOR REVIEW (SITE-BUILT SHELTER)
3/10/05	MLB	ISSUE FOR SUBMITAL
5/19/05	MLB	ISSUE FOR SUBMITAL
6/24/05	MLB	ISSUE FOR REVIEW
8/16/05	MLB	REVISED PER PLANNING COMMENTS
10/5/05	MLB	REVISED MECHANICAL LOCATION

DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS

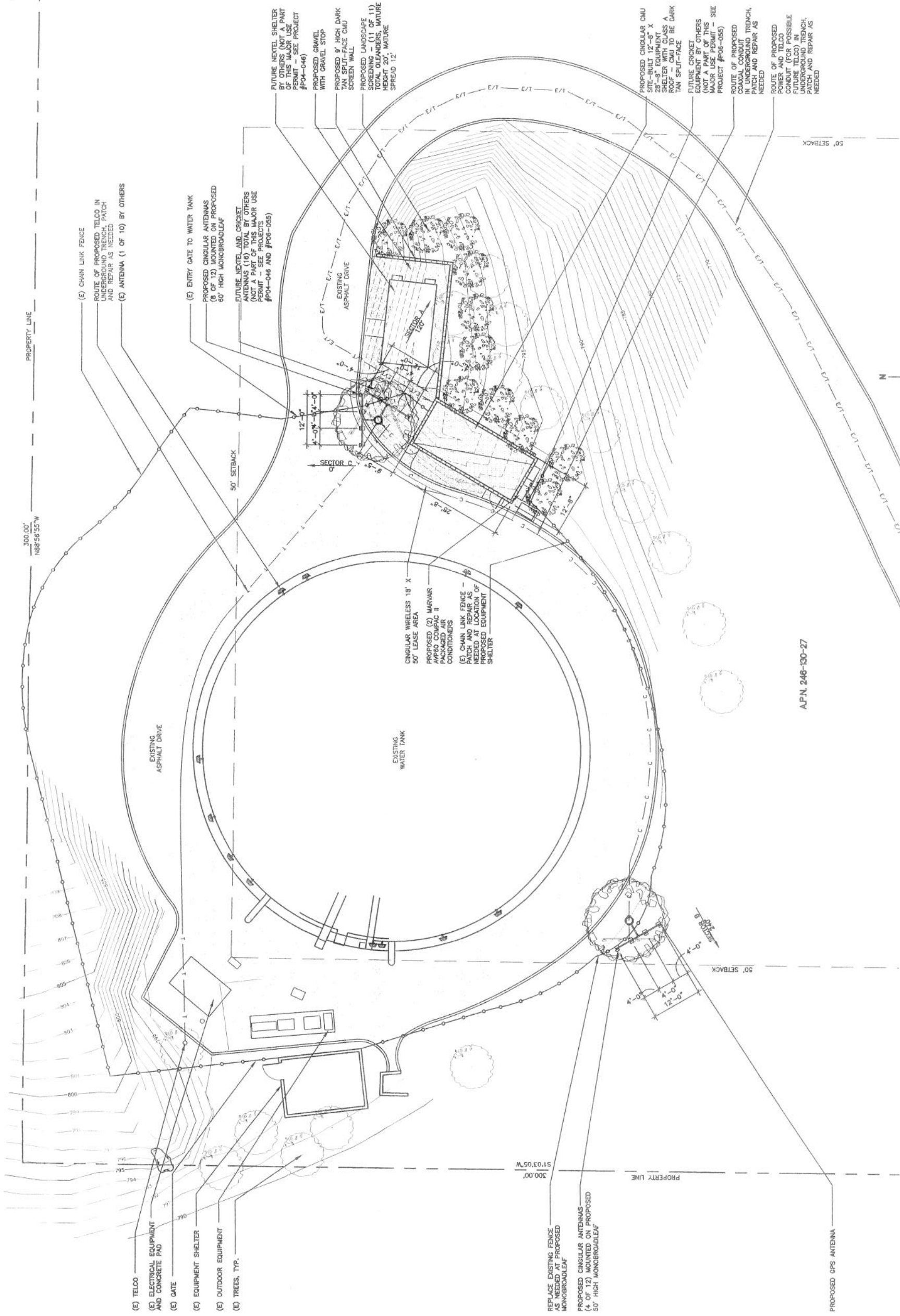
Z01
SITE PLAN

SCALE 1"=20'-0"

1

0501.05
PLOT SCALE 1:1 (3638 X 872)

DATE	BY	ISSUE DESCRIPTION
08/01/05	TW	ISSUE FOR SUBMITTAL
09/21/05	JCL	REVISED FINALS
1/16/05	MLB	REVISED TO INCLUDE CRICKET
1/24/05	MLB	ISSUE FOR REVIEW
1/26/05	MLB	ISSUE FOR REVIEW
3/4/06	MLB	ISSUE FOR REVIEW
3/16/06	MLB	ISSUE FOR SUBMITTAL
4/2/06	MLB	REVISED PER PLANNING COMMENTS
5/3/06	MLB	ISSUE FOR FINAL
8/16/06	MLB	REVISED PER PLANNING COMMENTS
10/5/06	MLB	REVISED MECHANICAL LOCATION



DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS
3639 FIRST AVENUE, SUITE 100, SAN DIEGO, CA 92103
619.299.4210 • 619.299.4250 FAX • DDADIA@AOL.COM



PROJECT NAME

JAMACHA-HILLSIDE WATER TANK
SS-628-01
WIRELESS

12887 MECHEORST WAY, EL CAJON, CA 92019

ISSUES REVISIONS

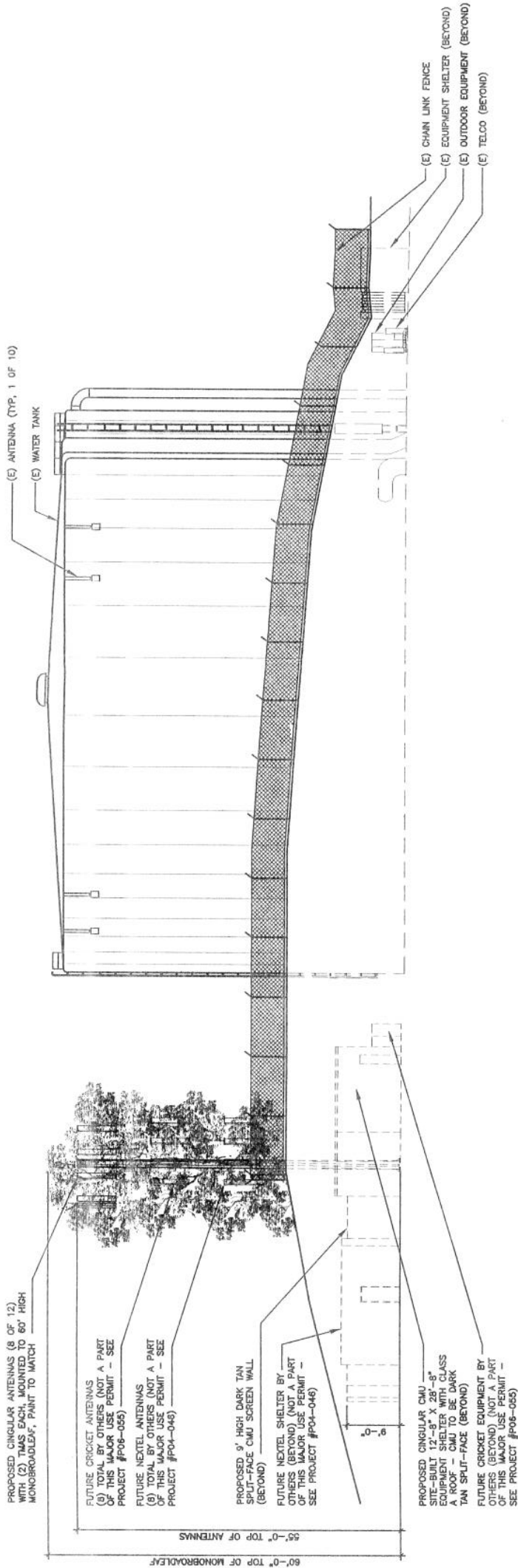
DATE	BY	ISSUE DESCRIPTION
08/01/05	TJW	FINALS FOR SUBMITTAL
09/21/05	JKL	REVISED FINALS
1/16/06	MLB	REVISED TO INCLUDE CRICKET
1/26/06	MLB	ISSUE FOR REVIEW
3/4/06	MLB	ISSUE FOR SUBMITTAL
4/24/06	MLB	REVISED PER PLANNING COMMENTS
5/1/06	MLB	ISSUE FOR FINAL
6/16/06	MLB	REVISED PER PLANNING COMMENTS
10/5/06	MLB	REVISED MECHANICAL LOCATION

SHEET INFORMATION

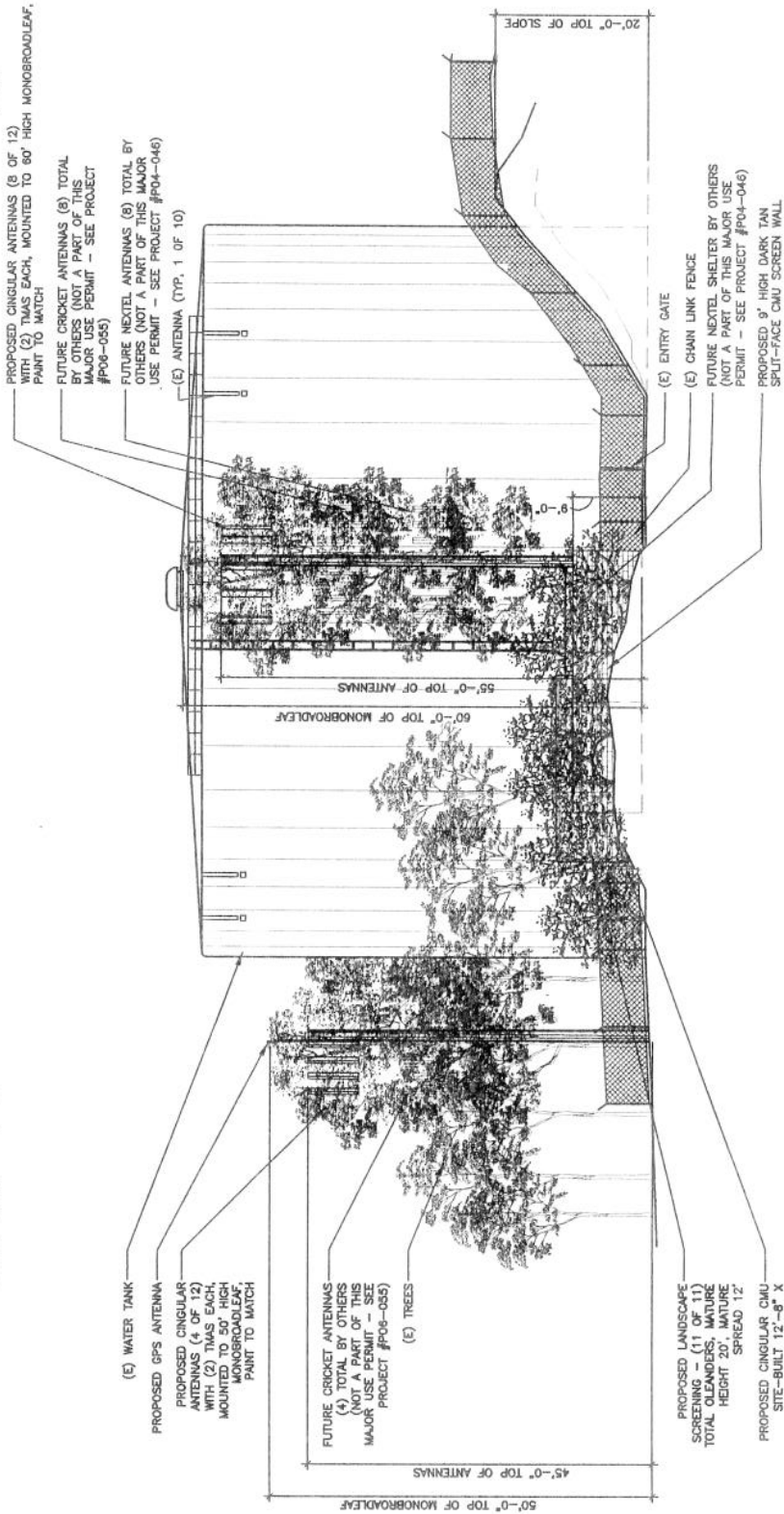
DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS

Z03
ELEVATIONS

0501.05
PLOT SCALE 1/16" = 1'-0"

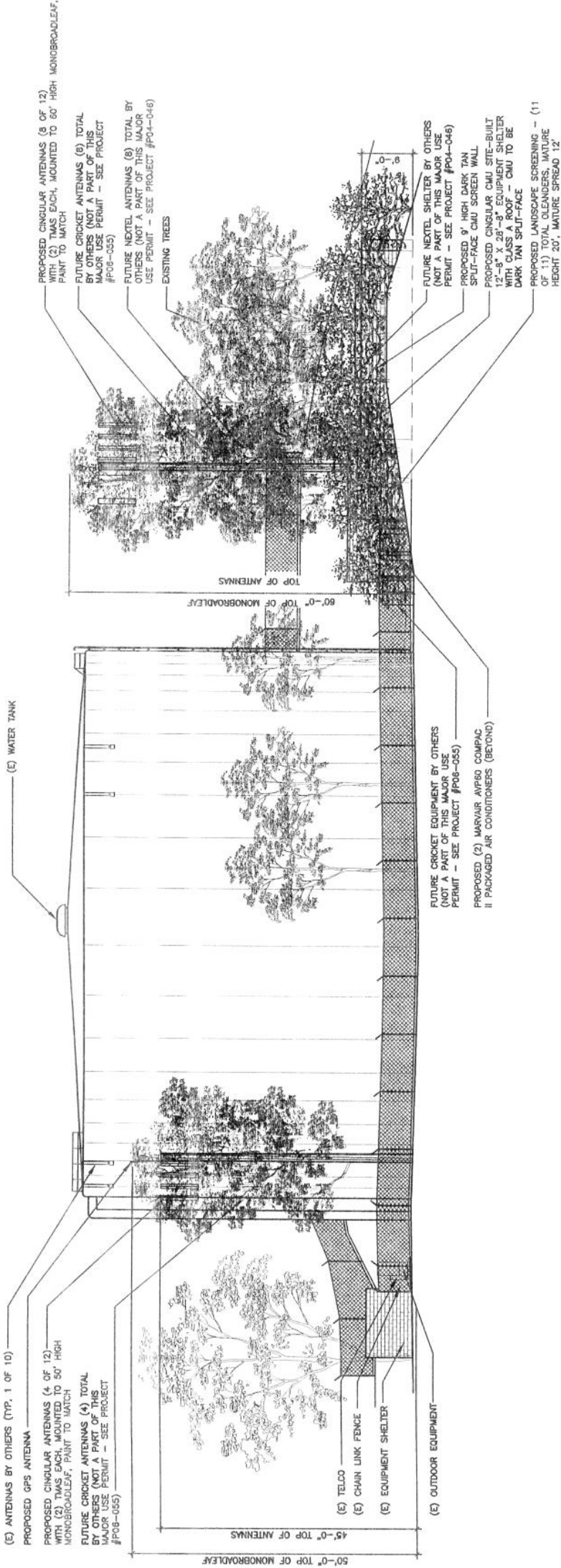


NORTH ELEVATION
SCALE 3/32" = 1'-0"



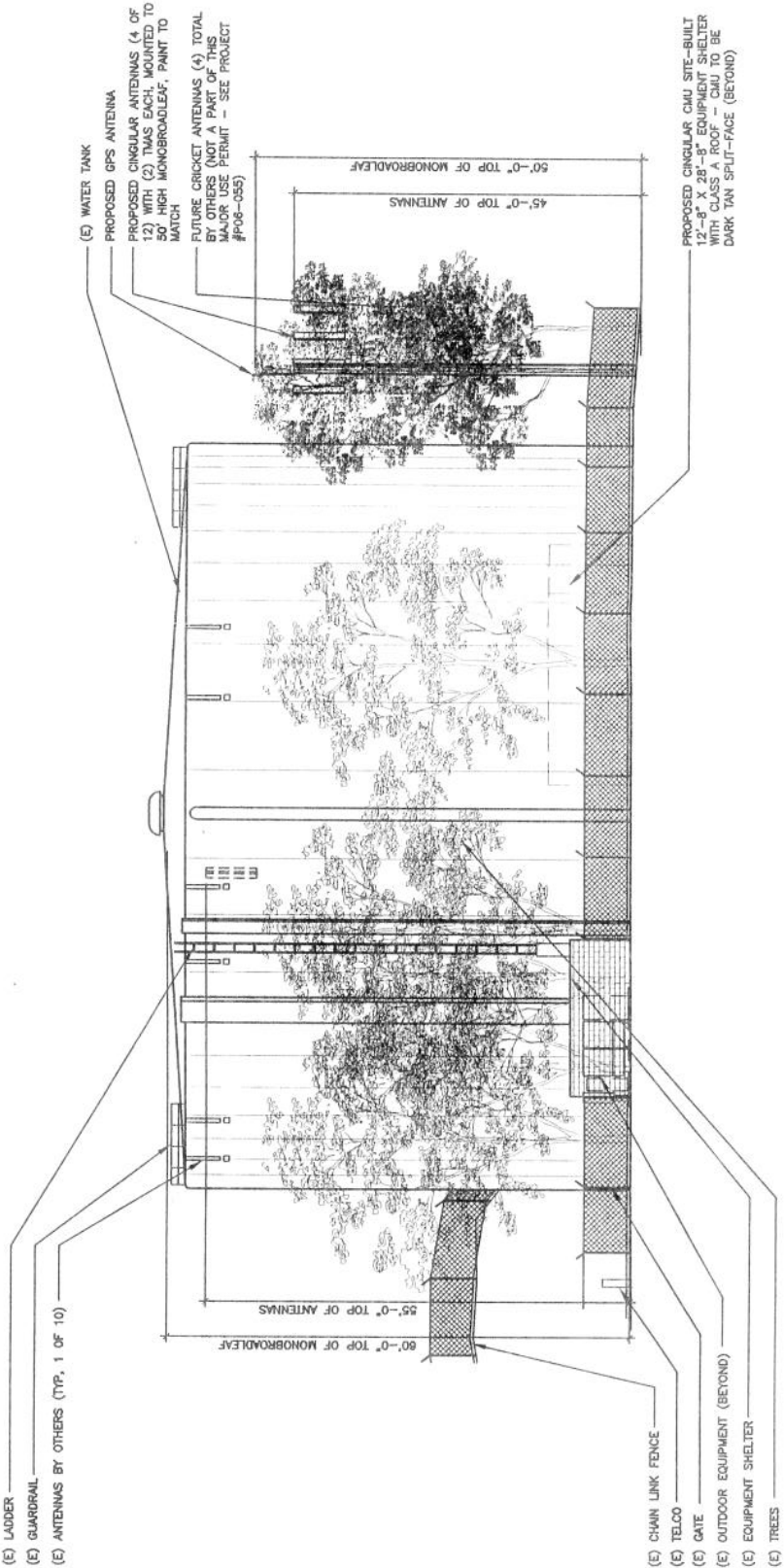
EAST ELEVATION
SCALE 3/32" = 1'-0"

THESE ORIGINAL DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF DGA AND SHALL NOT BE USED IN CONNECTION WITH ANY OTHER WORK EXCEPT BY AGREEMENT WITH DGA. THERE SHALL BE NO CHANGES OR DEVIATIONS WITHOUT THE CONSENT OF DGA. WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF THE DGA PRIOR TO THE COMMENCEMENT OF ANY WORK.



SOUTH ELEVATION
SCALE 3/32" = 1'-0"

- (E) LADDER
- (E) GUARDRAIL
- (E) ANTENNAS BY OTHERS (TYP. 1 OF 10)



WEST ELEVATION
SCALE 3/32" = 1'-0"

DATE	BY	ISSUE DESCRIPTION
08/01/05	TJW	FINALS FOR SUBMITTAL
09/21/05	JKL	REVISD FOR REVIEW
1/16/06	MLB	REVISD TO INCLUDE CRICKET
1/26/06	MLB	ISSUE FOR REVIEW
3/4/06	MLB	ISSUE FOR SUBMITTAL
3/16/06	MLB	ISSUE FOR SUBMITTAL
4/24/06	MLB	REVISD PER PLANNING COMMENTS
5/1/06	MLB	ISSUE FOR FINAL
5/16/06	MLB	REVISD PER PLANNING COMMENTS
10/5/06	MLB	REVISD MECHANICAL LOCATION

ISSUES REVISIONS

SHEET INFORMATION

DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS

Z04
ELEVATIONS

5501.05
PLOT SCALE 1:1 (36x36" D SIZE)

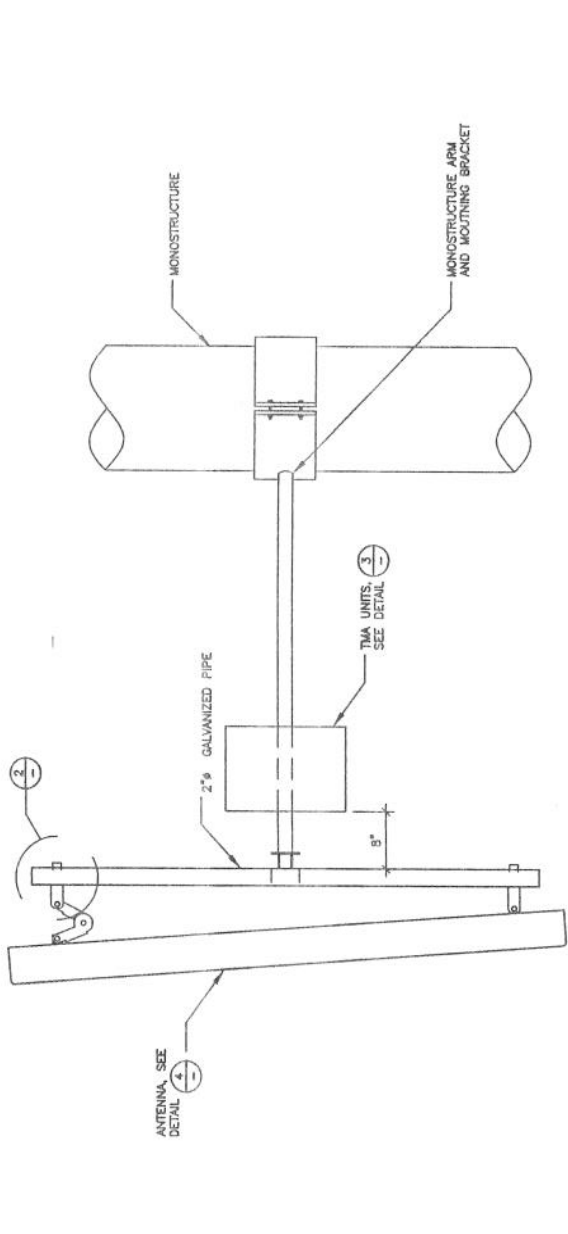
DI DONATO ASSOCIATES
ARCHITECTURE + GRAPHICS
3039 FIRST AVENUE, SUITE 100 - SAN DIEGO, CA 92103
619.299.4210 - 619.299.4250 FAX - DDAMAIL@AOL.COM



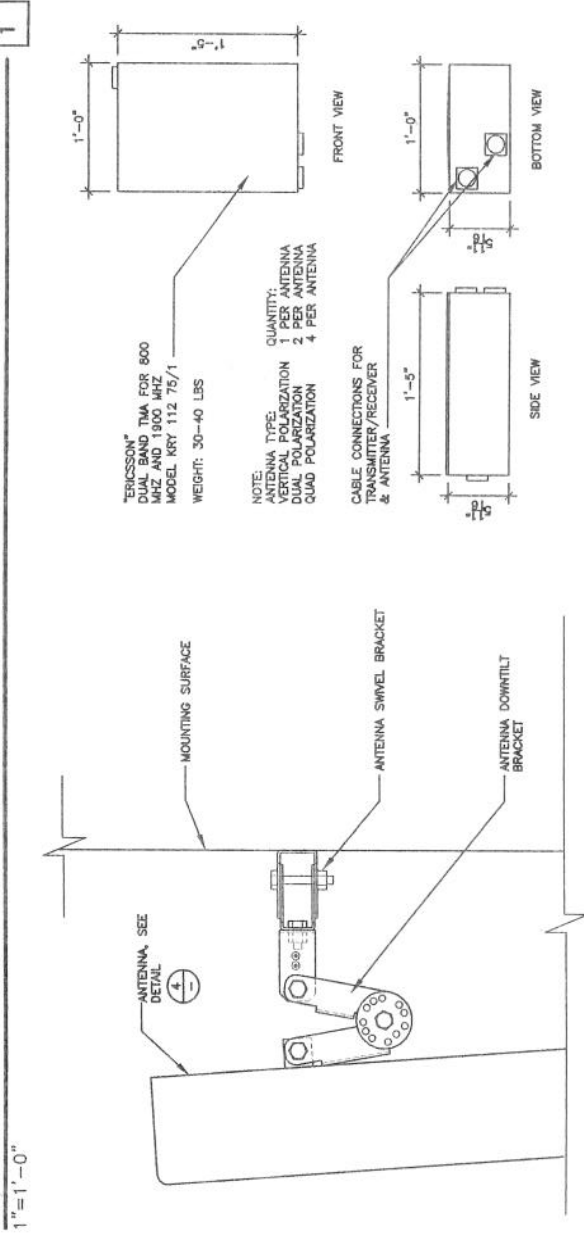
PROJECT NAME

JAMACHA-HILLSIDE WATER TANK
SS-628-01
WIRELESS

12687 WIEGHORST WAY, EL CAJON, CA 92019



TYPICAL ANTENNA MOUNT



ANTENNA MOUNT

3'-1'-0"

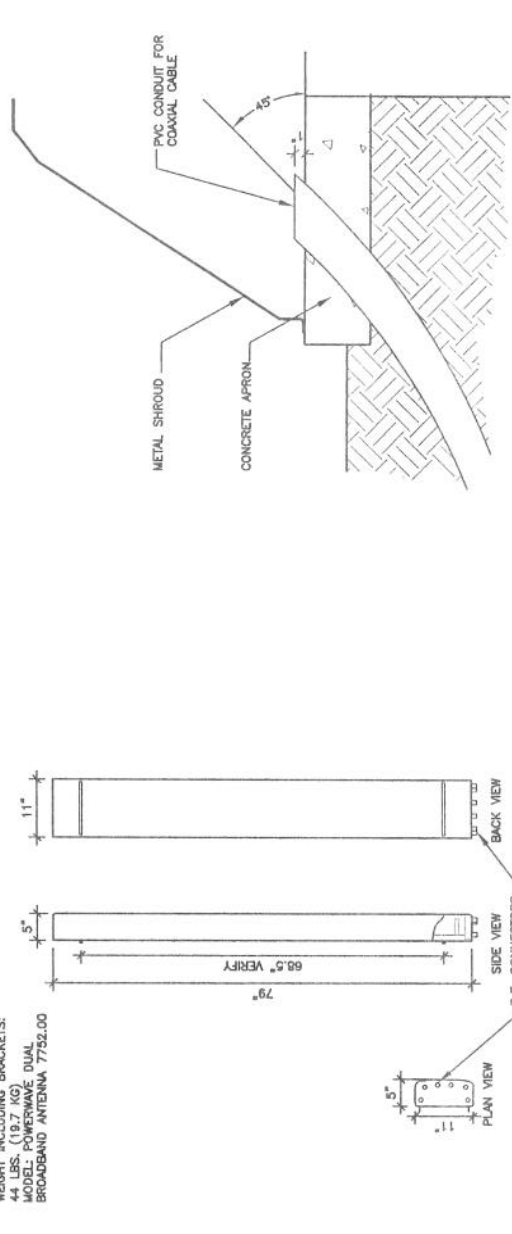
WEIGHT INCLUDING BRACKETS:
44 LBS. (19.7 KG) DUAL
BROADBAND ANTENNA 7752.00

2

TMA UNIT

1 1/2'-1'-0"

3



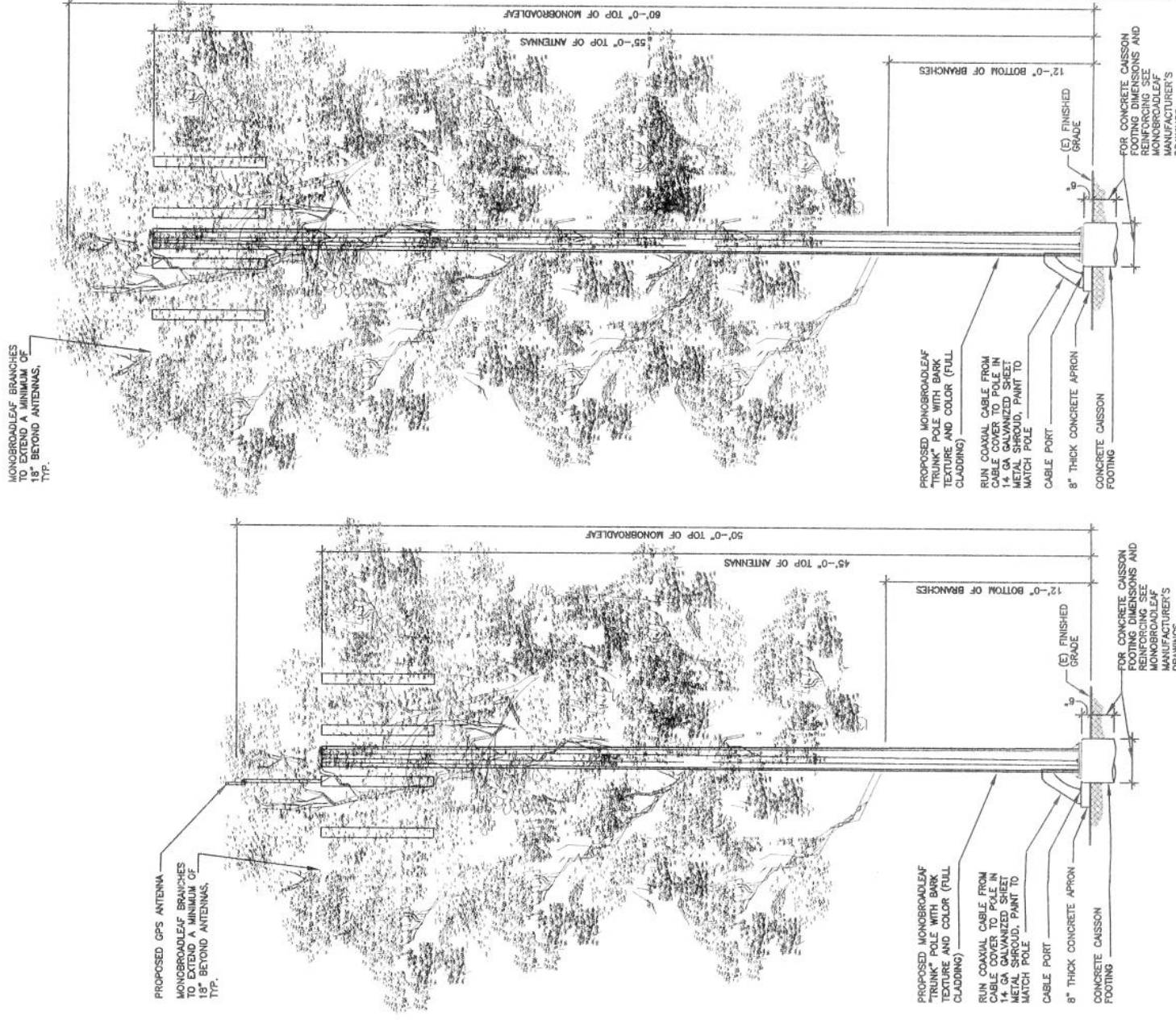
"POWERWAVE" ANTENNA DETAIL

3/4'-1'-0"

COAXIAL CONDUIT

1 1/2'-1'-0"

5



50' MONOSTRUCTURE

1/4'-1'-0"

6

60' MONOSTRUCTURE

1/4'-1'-0"

7

APPENDIX B

**Pertinent Sections of the County of San Diego Scoping Letter,
Dated August 10, 2006**

ATTACHMENT D NOISE ISSUES

Noise Ordinance

General information: A noise analysis is needed to determine whether or not noise levels exceed San Diego County standards. Noise analysis is required for a project that generates high levels of noise either through activities directly associated with the proposal (direct and cumulative impacts).

If the noise impacts are associated with activities on the site, such as rock crushing or some other proposed activity, the noise analysis shall include estimates of noise generation potential from the site utilizing measurements from similar activities that are already in existence. The noise analysis must conform to the San Diego County Noise Ordinance.

A preliminary review of the project information provided by the AEIS indicates that there is insufficient information to determine whether permanent equipment and operations on-site will exceed sound level limits of the San Diego County Noise Ordinance (Section 36-404). The County Noise Ordinance does not permit noise levels that impact adjoining properties or exceed County Noise Standards. The project site is zoned S90, Holding Area Use Regulations and adjacent land uses are zoned S80, Open Space use Regulations. These zones allow a one-hour average sound level of 50 decibels (dBA) from 7 a.m. to 10 p.m. and 45 decibels (dBA) from 10 p.m. to 7 a.m. In order for the Department to make a determination on the project's conformance with County noise standards, the applicant must demonstrate that the hourly average sound levels do not exceed either threshold at the property line, as the most stringent Ordinance condition for the project.

To determine conformance to the County Noise Ordinance, a noise study is required and it is essential that this component of this analysis include the following information:

- (1). Manufacturers Spec Sheet for all noise producing equipment on-site that identifies the ARI standard and/or decibel (dBA) per range. It is important to note that all noise producing sources must be included.
- (2). Additional plot plans that identifies the site location of all noise sources in relation to property lines. It is essential to address all potential noise sources on-site and to include a discussion related to openings within all surrounding walls or fences, such as driveways, fencing and gates.
- (3). Hours of operation and activity level at each hour.

The attached Memorandum of Understanding must be executed by the applicant and consultant and subsequently submitted with the first iteration review.

APPENDIX C

San Diego County Code, Section 36.404, Sound Level Limits

Section 36.404

[Home](#)
[Citations](#)
[File a Complaint](#)
[Contact Us](#)

SECTION 36.404 SOUND LEVEL LIMITS

Unless a variance has been applied for and granted pursuant to this chapter, it shall be unlawful for any person to cause or allow the creation of any noise to the extent that the one-hour average sound level, at any point on or beyond the boundaries of the property on which the sound is produced, exceeds the applicable limits set forth below except that construction noise level limits shall be governed by Section 36.410.

ZONE	TIME	APPLICABLE LIMIT ONE-HOUR AVERAGE SOUND LEVEL (DECIBELS)
R-S, R-D, R-R, R-MH, A-70, A-72, S-80, S-81, S-87, S-88, S-90, S-92, R-V, AND R-U. Use regulations with a density of less than 11 dwelling unit per acre.	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
R-RO, R-C, R-M, C-30, S-86, R-V AND R-U Use regulations with a density of 11 or more dwelling units per acre.	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
S-94 and all other commercial zones	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
M-50, M-52, M-54	Anytime	70
S-82, M-58, and all other industrial zones	Anytime	75

If the measured ambient level exceeds the applicable limit noted above, the allowable one-hour average sound level shall be the ambient noise level. The ambient noise level shall be measured when the alleged noise violation source is not operating.

The sound level limit at a location on a boundary between two (2) zoning districts is the arithmetic mean of the respective limits for the two districts provided however, that the one-hour average sound level limit applicable to extractive industries including but not limited to borrow pits and mines, shall be 75 decibels at the property line regardless of the zone where the extractive industry is actually located.

Fixed-location public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the noise level limits of this section, measured at or beyond six (6) feet from the boundary of the easement upon which the equipment is located. (Amended by Ord. No. 7094 (N.S.) Effective 3-25-86.)

APPENDIX D

Cadna Analysis Data and Results

Cingular Noise Levels

Name	M. ID	Level Lr		Limit. Value		Land Use		Height	Coordinates		
		Day	Night	Day	Night	Type	Auto Noise Type		X	Y	Z
		(dBA)	(dBA)	(dBA)	(dBA)			(m)	(m)	(m)	(m)
Northern Property Line	R1	32.8	32.8	0.0	0.0		x Total	1.52 r	50.19	90.51	249.44
Southern Property Line	R2	40.3	40.3	0.0	0.0		x Total	1.52 r	69.52	-1.29	233.50
Eastern Property Line	R3	44.2	44.2	0.0	0.0		x Total	1.52 r	92.28	47.43	241.53
Western Property Line	R4	21.1	21.1	0.0	0.0		x Total	1.52 r	1.40	74.47	242.42

Sprint Noise Levels

Name	M. ID	Level Lr		Limit. Value		Land Use		Height	Coordinates		
		Day	Night	Day	Night	Type	Auto		X	Y	Z
		(dBA)	(dBA)	(dBA)	(dBA)			(m)	(m)	(m)	(m)
Northern Property Line	R1	26.0	26.0	0.0	0.0		x	1.52 r	50.19	90.51	249.44
Southern Property Line	R2	13.8	13.8	0.0	0.0		x	1.52 r	69.52	-1.29	233.50
Eastern Property Line	R3	6.0	6.0	0.0	0.0		x	1.52 r	92.28	47.43	241.53
Western Property Line	R4	36.3	36.3	0.0	0.0		x	1.52 r	1.40	74.47	242.42

T-Mobile Noise Levels

Name	M. ID	Level Lr		Limit. Value		Land Use		Height	Coordinates		
		Day	Night	Day	Night	Type	Auto Noise Type		X	Y	Z
		(dBA)	(dBA)	(dBA)	(dBA)			(m)	(m)	(m)	(m)
Northern Property Line	R1	23.6	23.6	0.0	0.0		x Total	1.52 r	50.19	90.51	249.44
Southern Property Line	R2	10.3	10.3	0.0	0.0		x Total	1.52 r	69.52	-1.29	233.50
Eastern Property Line	R3	4.6	4.6	0.0	0.0		x Total	1.52 r	92.28	47.43	241.53
Western Property Line	R4	30.7	30.7	0.0	0.0		x Total	1.52 r	1.40	74.47	242.42

Nextel Noise Levels

Name	M. ID	Level Lr		Limit. Value		Land Use		Height	Coordinates		
		Day	Night	Day	Night	Type	Auto		X	Y	Z
		(dBA)	(dBA)	(dBA)	(dBA)			(m)	(m)	(m)	(m)
Northern Property Line	R1	41.1	41.1	0.0	0.0		x	1.52 r	50.19	90.51	249.44
Southern Property Line	R2	27.4	27.4	0.0	0.0		x	1.52 r	69.52	-1.29	233.50
Eastern Property Line	R3	34.3	34.3	0.0	0.0		x	1.52 r	92.28	47.43	241.53
Western Property Line	R4	21.2	21.2	0.0	0.0		x	1.52 r	1.40	74.47	242.42

Cricket Noise Levels

Name	M. ID	Level Lr		Limit. Value		Land Use		Height	Coordinates		
		Day	Night	Day	Night	Type	Auto		X	Y	Z
		(dBA)	(dBA)	(dBA)	(dBA)			(m)	(m)	(m)	(m)
Northern Property Line	R1	32.1	32.1	0.0	0.0		x	1.52 r	50.19	90.51	249.44
Southern Property Line	R2	30.8	30.8	0.0	0.0		x	1.52 r	69.52	-1.29	233.50
Eastern Property Line	R3	32.3	32.3	0.0	0.0		x	1.52 r	92.28	47.43	241.53
Western Property Line	R4	11.4	11.4	0.0	0.0		x	1.52 r	1.40	74.47	242.42

Cumulative Noise Levels

Name	M. ID	Level Lr		Limit. Value		Land Use		Height	Coordinates		
		Day	Night	Day	Night	Type	Auto Noise Type		X	Y	Z
		(dBA)	(dBA)	(dBA)	(dBA)			(m)	(m)	(m)	(m)
Northern Property Line	R1	42.3	42.3	0.0	0.0		x Total	1.52 r	50.19	90.51	249.44
Southern Property Line	R2	40.9	40.9	0.0	0.0		x Total	1.52 r	69.52	-1.29	233.50
Eastern Property Line	R3	44.9	44.9	0.0	0.0		x Total	1.52 r	92.28	47.43	241.53
Western Property Line	R4	37.6	37.6	0.0	0.0		x Total	1.52 r	1.40	74.47	242.42

Cadna/A-Berechnung
Version 3.5.115 (32 Bit)
Datei: C:\Do
Berechnungsparameter:

General	Germany (TA Lärm)
Country	0
Max. Error (dB)	2000
Max. Search Radius (m)	0
Min. Dist Src to Rcvr	0.5
Partition	1000
Raster Factor	1
Max. Length of Section (m)	0
Min. Length of Section (m)	0
Min. Length of Section (%)	On
Proj. Line Sources	On
Proj. Area Sources	960
Ref. Time	480
Reference Time Day (min)	0
Reference Time Night (min)	6
Daytime Penalty (dB)	10
Recr. Time Penalty (dB)	DTM
Night-time Penalty (dB)	Standard Height (m)
DTM	240.18
Standard Height (m)	Triangulation
Model of Terrain	Reflection
Reflection	max. Order of Reflection
max. Order of Reflection	0
Search Radius Src/Rcvr	100.00 100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rcvr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.1
Industrial (ISO 9613)	some Obj
Lateral Diffraction	On
Obst. within Area Src do not shield	Excl. Ground Alt. over Barrier
Screening	Dz with limit
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°C)	10
rel. Humidity (%)	70
Ground Absorption G	1
Wind Speed for Dir. (m/s)	3
Roads (RLS-90)	Strictly acc. to RLS-90
Railways (Schall 03)	Strictly acc. to Schall 03 / Schall-Transrapid
Strictly acc. to Schall 03 / Schall-Transrapid	Aircraft (AzB)
Strictly acc. to AzB	Strictly acc. to AzB
Northern Property Line	R1
ID:	50.19
X:	90.51
Y:	249.44
Z:	247.92
Ground:	
ISO	Bezeichnung
	ID
	Marvaiv ComPac II HVAC Unit
	69.61
	62.52 243.38
	Marvaiv ComPac II HVAC Unit
	69.61
	62.52 243.38
	Marvaiv ComPac II HVAC Unit
	69.61
	62.52 243.38
	Marvaiv ComPac II HVAC Unit
	69.61
	62.52 243.38
	Marvaiv ComPac II HVAC Unit
	69.61
	62.52 243.38

[illegible]

[illegible]

Limit. Value D/N:	0	0
Level D/N:	42.2791	42.2791

Receiver Southern Property Line

ID: RZ 69 52

X	03.02
X	-1.29

2335

231.98

Ground:

150

Bezeichnung	ID	X	Y	Z	Ground	Relief	Ord	Lx	Ly	UA	Inm	Freq	K0b	Agr	Abar	Z	Aam	Alous	Cinet	Chn	Uc	NL	Uc	
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	-24.8	-24.8	1	56.47	4.57	32	46.04	0	-3	7.54	-0.1	0	0	0	0	0	0	-75.35	-75.35
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	68.3	68.3	1	56.47	4.57	63	46.04	0	-3	7.3	-0.1	0.01	0	0	0	0	0	17.98	17.98
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	76	76	1	56.47	4.57	125	46.04	0	0.81	2.98	-0.1	0.02	0	0	0	0	0	26.18	26.18
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	81.5	81.5	1	56.47	4.57	250	46.04	0	10.1	0	-0.1	0.06	0	0	0	0	0	25.34	25.34
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	81.9	81.9	1	56.47	4.57	500	46.04	0	9.99	0	-0.1	0.11	0	0	0	0	0	25.79	25.79
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	85.2	85.2	1	56.47	4.57	1000	46.04	0	2.17	0	-0.1	0.21	0	0	0	0	0	36.81	36.81
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	82.6	82.6	1	56.47	4.57	2000	46.04	0	0	0	-0.1	0.55	0	0	0	0	0	36.05	36.05
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	75.2	75.2	1	56.47	4.57	4000	46.04	0	0	0	-0.1	1.85	0	0	0	0	0	27.34	27.34
Marvair ComPac II HVAC Unit	54.88	52.34	243.38	242.53	0	68.7	68.7	1	56.47	4.57	8000	46.04	0	0	0	-0.1	6.6	0	0	0	0	0	16.09	16.09
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	-24.8	-24.8	1	64.57	4.87	32	47.2	0	-3	6.58	1.02	0	0	0	0	0	0	-75.55	-75.55
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	68.3	68.3	1	64.57	4.87	63	47.2	0	0.96	8.03	1.02	0.03	0	0	0	0	0	15.61	15.61
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	76	76	1	64.57	4.87	125	47.2	0	10.6	1.66	1.02	0.07	0	0	0	0	0	21.98	21.98
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	81.5	81.5	1	64.57	4.87	250	47.2	0	9.4	5.47	1.02	0.12	0	0	0	0	0	19.73	19.73
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	81.9	81.9	1	64.57	4.87	500	47.2	0	1.72	15.34	1.02	0.24	0	0	0	0	0	20.73	20.73
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	85.2	85.2	1	64.57	4.87	1000	47.2	0	0	19.09	1.02	0.62	0	0	0	0	0	15.72	15.72
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	82.6	82.6	1	64.57	4.87	2000	47.2	0	0	19.52	1.02	2.12	0	0	0	0	0	6.4	6.4
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	75.2	75.2	1	64.57	4.87	4000	47.2	0	0	19.75	1.02	7.55	0	0	0	0	0	-5.77	-5.77
Marvair ComPac II HVAC Unit	69.61	62.52	243.38	242.3	0	68.7	68.7	1	64.57	4.87	8000	47.2	0	0	19.75	1.02	7.55	0	0	0	0	0	-75.31	-75.31
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	-24.8	-24.8	1	57.28	4.6	32	46.16	0	-3	7.38	-0.1	0	0	0	0	0	0	-0.38	-0.38
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	49.7	49.7	1	57.28	4.6	63	46.16	0	0.92	2.02	-0.1	0.01	0	0	0	0	0	3.61	3.61
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	52.7	52.7	1	57.28	4.6	125	46.16	0	9.82	0	-0.1	0.06	0	0	0	0	0	4.99	4.99
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	61	61	1	57.28	4.6	250	46.16	0	8.1	0	-0.1	0.11	0	0	0	0	0	16.16	16.16
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	70.5	70.5	1	57.28	4.6	500	46.16	0	8.1	0	-0.1	0.21	0	0	0	0	0	23.73	23.73
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	71.4	71.4	1	57.28	4.6	1000	46.16	0	1.33	0	-0.1	0.55	0	0	0	0	0	23.72	23.72
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	70.4	70.4	1	57.28	4.6	2000	46.16	0	0	0	-0.1	1.88	0	0	0	0	0	16.09	16.09
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	64.1	64.1	1	57.28	4.6	4000	46.16	0	0	0	-0.1	0.69	0	0	0	0	0	-1.13	-1.13
CMO Equipment Cabinet	51.75	52.23	243.53	242.32	0	51.7	51.7	1	57.28	4.6	8000	46.16	0	0	0	-0.1	6.69	0	0	0	0	0	-75.65	-75.65
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	-24.8	-24.8	1	58.01	4.47	32	46.27	0	-3	7.43	-0.1	0	0	0	0	0	0	-0.98	-0.98
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	49.7	49.7	1	58.01	4.47	63	46.27	0	0.93	3.13	-0.1	0.01	0	0	0	0	0	2.37	2.37
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	52.7	52.7	1	58.01	4.47	125	46.27	0	9.89	0	-0.1	0.06	0	0	0	0	0	4.81	4.81
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	61	61	1	58.01	4.47	250	46.27	0	8.16	0	-0.1	0.11	0	0	0	0	0	15.99	15.99
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	70.5	70.5	1	58.01	4.47	500	46.27	0	8.16	0	-0.1	0.21	0	0	0	0	0	23.61	23.61
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	71.4	71.4	1	58.01	4.47	1000	46.27	0	1.34	0	-0.1	0.56	0	0	0	0	0	23.6	23.6
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	70.4	70.4	1	58.01	4.47	2000	46.27	0	0	0	-0.1	0.21	0	0	0	0	0	15.96	15.96
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	64.1	64.1	1	58.01	4.47	4000	46.27	0	0	0	-0.1	1.9	0	0	0	0	0	-1.32	-1.32
CMO Equipment Cabinet	52.37	53.21	243.53	242.32	0	51.7	51.7	1	58.01	4.47	8000	46.27	0	0	0	-0.1	6.78	0	0	0	0	0	-83.96	-83.96
CMO Equipment Cabinet	10.29	68.5	242.92	241.86	0	-29.1	-29.1	1	92.02	3.34	32	50.28	0	-3.5	8.01	0.41	0	0	0	0	0	0	-3.5	-3.5
Sprint Modcell Cabinet Set	10.29	68.5	242.92	241.86	0	53	53	1	92.02	3.34	63	50.28	0	-3.5	9.64	0.41	0.01	0	0	0	0	0	-3.5	-3.5
Sprint Modcell Cabinet Set	10.29	68.5	242.92	241.86	0	53	53	1	92.02	3.34	63	50.28	0	-3.5	9.64	0.41	0.01	0	0	0	0	0	-3.5	-3.5

[illegible]

Limit, Value D/N:	0	0
Level D/N:	40.9343	40.9343

Eastern Property Line

R3
Eastern Property Line

92.28

47.43

241.53

240.01

ISO

Bezeichnung	ID
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Marvair ComPac II HVAC Unit

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Marvaire ComPac II HVAC Unit

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